Pollution from vehicles is more than just hot air

by Jay Shepard, Solid Waste & Financial Assistance Program - HQ

Washingtonians drove their vehicles over 54 billion miles in 2000¹. That's more than 2 million times around the Earth, more than 100 thousand trips to the moon and back and two round trips to New York City for each of the 5 million cars in this state.

From all our cars and driving, it's estimated that we generate 2 *trillion* pounds of vehicle-related solid waste each year. That's 341 pounds per person in the state from routine maintenance, repair and end-of-life disposal.

That's just the solid waste. So, how else do motor vehicles affect the environment besides air pollution? Consider these:

- "Non-point water pollution" from stormwater runoff. An estimated 4 million gallons of oil leak from or are burned by cars in Washington each year. Much of that oil lands on the pavement. Brake lining gradually wears away over time, as does the rubber from tires. Unburned fuel drips from the exhaust pipes of many cars. The substances that end up on the roads are washed down storm drains when it rains.
- Land development involving impervious surfaces. The majority of impervious surfaces are created to accommodate cars, i.e., roads, parking lots and garages. These hardened surfaces result in excess storm water, potential flooding and pollutant concentration.
- By washing a vehicle an average of once per month, we use about 2 trillion gallons of water annually. That's potable water (from the expensive drinking-water treatment plants we have built to assure that the pollution we have put into the water upstream won't reach our bodies), and it's enough water for 80,000 people.

Now, the hot air. Almost 3 trillion gallons of fuel were used to travel those 54 billion miles mentioned earlier. This resulted in more than 51 trillion pounds of air pollution released into our air, or more than 9,000 pounds per person.

Now, consider this. The total cost of owning and operating a motor vehicle is about \$6,200 per year. On the average, Washingtonians spend about 370 hours per year working to own and operate a motor vehicle. We spend about 530 hours per year **in** the car driving or waiting with the engine idling.

What's the alternative? For now, drive your car only when necessary. Coordinate your trips with family members or neighbors. Keep your car tuned up and in good condition. Make it last.

When you buy a new car, consider a low, super-low or ultra-super-low emission vehicle. In the not too distant future, there will be vehicles that operate on alternative fuels and extremely energy efficient personal transportation units for the urban environment.

¹ Estimate based on historical trends reflected in the Washington State Data Book, Road Usage and Safety, Washington State Office of Financial Management.